

ABSTRACT

A rotary drum filter has a plurality of longitudinally extending division grids mounted about the outer circumference of a drum. A plurality of corrugated sheets are provided, with the leading and trailing edges of each sheet mounted to circumferentially adjacent pairs of division grids to define filtrate compartments. An equivalent number of perforated filter plates are also provided. Each filter plate is attached to the top of a corrugated sheet and has a leading edge and a trailing edge that are set back from the leading edge and trailing edge of the corrugated sheet. A seal clip is positioned near the leading edge of each corrugated sheet. A seal member or seal members is/are held in place by the seal clip and is/are positioned at the face of the leading edge of each corrugated sheet or beneath and near the face of each corrugated sheet. A perforated cap strip can be removably attached to the top of each division grid to thereby retain for confined movement each filter plate and corrugated sheet combination (filter deck and drainage deck) during rotary drum filter operation and to allow easy replacement of the filter plate and corrugated sheet combination(s) and/or cap strip(s) when the rotary drum filter is not in operation. This rotary drum filter design and operation has increased capacity and efficiency.